

WHAT IS CLAIMED IS:

1. A liquid crystal device comprising: a layer of discotic liquid crystal placed in an edge-on and uniaxial alignment state.

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2. A liquid crystal device according to Claim 1, wherein the layer of discotic liquid crystal is disposed between a pair of substrates.

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3. A liquid crystal device according to Claim 1, wherein said discotic liquid crystal is in a nematic discotic phase.

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4. A liquid crystal device according to Claim 3, wherein said discotic liquid crystal is in mixture with a rod-shaped liquid crystal to form the nematic discotic phase.

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5. A liquid crystal device according to Claim 1, further comprising a voltage application means for switching the discotic liquid crystal by an electric field change.

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6. A liquid crystal device according to Claim 1, functioning as a phase compensator.

7. A liquid crystal device according to Claim 1,

functioning as a viewing angle compensator.

8. A liquid crystal device according to Claim 1,
further including an active element for transmitting a
5 voltage signal to the layer of discotic liquid
crystal.

9. A liquid crystal apparatus comprising: a
liquid crystal device according to Claim 1 and drive
10 means for driving the liquid crystal device.

10. A liquid crystal apparatus comprising: a
switching liquid crystal device, and a phase
compensator according to Claim 6 superposed with the
15 switching liquid crystal device.

11. A liquid crystal apparatus comprising: a
switching liquid crystal device, and a viewing angle
compensator superposed with the switching liquid
20 crystal device.

12. A liquid crystal composition comprising: a
discotic liquid crystal and a rod-shaped liquid
crystal disposed in mutually separate phases, wherein
25 the discotic liquid crystal is in a nematic discotic
phase.

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13. A liquid crystal composition according to Claim 12, wherein the rod-shaped liquid crystal is a nematic liquid crystal.

5 14. A liquid crystal composition according to Claim 12, wherein said discotic liquid crystal comprises a polymeric discotic liquid crystal formed by polymerization of a polymerizable discotic liquid crystal compound.

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15. A liquid crystal composition according to Claim 14, wherein said polymeric discotic liquid crystal has been formed by photopolymerization of the polymerizable discotic liquid crystal compound.

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16. A liquid crystal device, including a liquid crystal layer comprising a discotic liquid crystal and a rod-shaped liquid crystal disposed in mutually separate phases, wherein the discotic liquid crystal is in a nematic discotic phase.

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17. A liquid crystal device according to Claim 16, wherein the liquid crystal layer is disposed on at least one substrate subjected to an aligning treatment.

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18. A liquid crystal device according to Claim

16, wherein said discotic liquid crystal is placed in an edge-on and uniaxial alignment state.

19. A liquid crystal device according to Claim
5 16, wherein said rod-shaped liquid crystal has an in-plane switching characteristic.

20. A liquid crystal device according to Claim
10 16, wherein the liquid crystal layer is placed in an alignment state where the discotic liquid crystal and the rod-shaped liquid crystal are aligned to have alignment directors which are directed in an identical direction.

21. A liquid crystal device according to Claim
15 16, wherein the liquid crystal layer is placed in an alignment state where the discotic liquid crystal and the rod-shaped liquid crystal are aligned to have alignment directors which are perpendicular to each
20 other.

22. A liquid crystal device according to Claim
16, wherein wherein either one of the discotic liquid crystal and the rod-shaped liquid crystal is a
25 polymeric liquid crystal.

23. A liquid crystal device according to Claim

16, which is a reflection-type device emitting light reflected therefrom as a display signal.

24. A liquid crystal device according to Claim
5 22, further including a light-absorbing plate behind the device.

25. A liquid crystal device according to Claim
10 22, further including a reflection plate behind the device.

26. A liquid crystal device according to Claim
15 16, which is a projection-type device emitting light therefrom to be projected onto a screen.

27. A liquid crystal apparatus comprising: a
20 liquid crystal device according to Claim 16, and drive means for driving the liquid crystal device.

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